

CLAIMS

What is claimed is:

1. An apparatus comprising:

a physical layer controller able to configure a communication device to operate in a mode of communication selected from a first communication mode, in which a physical layer of the communication device is configured to receive transmissions of a first modulation type, a second communication mode, in which the physical layer is configured to receive transmissions of a second modulation type, and an autodetection mode, in which the communication device is able to automatically detect whether an incoming transmission is of the first modulation type or the second modulation type.

2. An apparatus according to claim 1, wherein the first modulation type comprises Complementary Code Keying and wherein the second modulation type comprises Orthogonal Frequency Division Multiplexing.

3. An apparatus according to claim 1 wherein said physical layer comprises:

a first receiver able to receive transmissions of said first modulation type;

a second receiver able to receive communication of the second modulation type; and

an autodetection module able to automatically detect whether an incoming transmission is of the first modulation type or the second modulation type.

4. An apparatus according to claim 1 wherein said controller is able to configure said communication device based on at least one criterion relating to a prior transmission received or transmitted by the communication device.

5. An apparatus according to claim 4 wherein said prior transmission comprises an outgoing Request To Send frame modulated in one of said first and second modulation types, and wherein the controller is able to configure said communication device to operate in either

said first or second communication modes based on the modulation type of said Request To Send frame.

6. An apparatus according to claim 5 wherein said communication device is configured to receive a Clear To Send frame in said first or second communication modes based on said Request To Send frame.

7. An apparatus according to claim 4 wherein said prior transmission comprises an outgoing data frame modulated in one of said first and second modulation types, and wherein the controller is able to configure said communication device to operate in either said first or second communication modes based on the modulation type of said outgoing data frame.

8. An apparatus according to claim 7 wherein said communication device is configured to receive an Acknowledgement frame in said first or second communication modes based on said outgoing data frame.

9. A method comprising:

configuring a communication device to operate in a mode of communication selected from a first communication mode, in which a physical layer of the communication device is configured to receive transmissions of a first modulation type, a second communication mode, in which the physical layer is configured to receive transmissions of a second modulation type, and an autodetection mode, in which the communication device is able to automatically detect whether an incoming transmission is of the first modulation type or the second modulation type.

10. A method according to claim 9 comprising:

receiving an incoming transmission of either the first modulation type or the second modulation type.

11. A method according to claim 9, wherein the first modulation type comprises Complementary Code Keying and wherein the second modulation type comprises Orthogonal Frequency Division Multiplexing.

12. A method according to claim 9 wherein configuring said communication device comprises configuring the communication device based on at least one criterion relating to a prior transmission received or transmitted by the communication device.

13. A method according to claim 12, wherein said prior transmission comprises an outgoing Request To Send frame modulated in one of said first and second modulation types, and wherein configuring comprises configuring said communication device to operate in either of said first or second communication modes based on the modulation type of said Request To Send frame.

14. A method according to claim 13, further comprising:

receiving a Clear To Send frame in the modulation type of said Request To Send frame.

15. A method according to claim 12 wherein said prior transmission comprises an outgoing data frame modulated in one of said first and second modulation types, and wherein configuring comprises configuring said communication device to operate in either said first or second communication modes based on the modulation type used to transmit said outgoing data frame.

16. A method according to claim 15 further comprising

receiving an Acknowledgement frame in the modulation type of said data frame.

17. A wireless communication device comprising:

an antenna able to send and receive transmissions;

a physical layer controller able to configure the communication device to operate in a mode of communication selected from a first communication mode, in which a receiver of the communication device is configured to receive transmissions of a first modulation type, a second communication mode, in which the receiver is configured to receive transmissions of a second modulation type, and an autodetection mode, in which the receiver is configured to automatically detect whether an incoming transmission is of the first modulation type or the second modulation type.

18. A wireless communication device according to claim 17, wherein the first modulation type comprises Complementary Code Keying and wherein the second modulation type comprises Orthogonal Frequency Division Multiplexing.

19. A wireless communication device according to claim 17 wherein the controller is able to configure said receiver based on at least one criterion relating to a prior transmission received or transmitted by the communication device.

20. A wireless communication device according to claim 19 wherein said prior transmission comprises an outgoing Request To Send frame, in one of said first and second modulation types, and wherein the controller is able to configure said receiver to operate in either of said first or second communication modes based on the modulation type of said Request To Send frame.

21. A wireless communication device according to claim 19 wherein said prior transmission comprises an outgoing data frame in one of said first and second modulation types, and wherein the controller is able to configure said receiver to operate in either of said

first or second communication modes based on the modulation type of said outgoing data frame.

22. A wireless communication system comprising:

a first communication station able to send a transmission; and

a second communication station comprising:

a receiver able to receive said transmission; and

a physical layer controller able to configure the receiver to operate in a communication mode selected from a first communication mode, in which the receiver is configured to receive a first modulation type, a second communication mode, in which the receiver is configured to receive a second modulation type, and an autodetection mode, in which the receiver is configured to automatically detect an incoming modulation type as being either the first modulation type or the second modulation type.

23. A wireless communication system according to claim 22, wherein the first modulation type comprises Complementary Code Keying and wherein the second modulation type comprises Orthogonal Frequency Division Multiplexing.

24. A wireless communication system according to claim 22 wherein said controller is able to configure said receiver based on at least one criterion relating to a prior transmission received or transmitted by the second communication station.

25. A wireless communication system according to claim 24 wherein said prior transmission comprises an outgoing Request To Send frame from the second station, in one of said first and second modulation types, wherein the controller is able to configure the receiver to operate in either said first or second communication modes based on the modulation type of said Request To Send Frame, and wherein the receiver is able to receive a Clear To Send frame sent by the first station in the modulation type of said Request To Send frame.

26. A wireless communication system according to claim 24 wherein said prior transmission comprises an outgoing data frame from the second station, in one of said first and second modulation types, wherein the controller is able to configure said receiver to operate in either said first or second communication modes based on the modulation type of said outgoing data frame, and wherein the receiver is able to receive an Acknowledgement frame sent by the first station in the modulation type of said Request To Send frame.

27. An article comprising a storage medium, having stored thereon instructions that, when executed by a computing platform, result in:

configuring a communication device to operate in a mode of communication selected from a first communication mode, in which a physical layer of the communication device is configured to receive transmissions of a first modulation type, a second communication mode, in which the physical layer is configured to receive transmissions of a second modulation type, and an autodetection mode, in which the communication device is able to automatically detect whether an incoming transmission is of the first modulation type or the second modulation type.

28. The article of claim 27, wherein the instructions further result in:

receiving an incoming transmission of either the first modulation type or the second modulation type.

29. The article of claim 27, wherein the first modulation type comprises Complementary Code Keying and wherein the second modulation type comprises Orthogonal Frequency Division Multiplexing.

30. The article of claim 27 wherein the instructions result in configuring the communication device based on at least one criterion relating to a prior transmission received or transmitted by the communication

31. The article of claim 30 wherein said prior transmission comprises an outgoing Request To Send frame modulated in one of said first and second modulation types, and wherein configuring comprises configuring said communication device to operate in either of said first or second communication modes based on the modulation type of said Request To Send frame.

32. The article of claim 30 wherein said prior transmission comprises receiving a Clear To Send frame in the modulation type of said Request To Send frame.